About

32. (New) An iron compound catalyst for inhibiting the generation of dioxin, comprising aggregates comprising iron oxide particles, iron oxide hydroxide particles or the mixture particles thereof and having a specific surface area of not less than 1.2 m^2/cm^3 when measured under a feed pressure of 1 bar in a dry granulometer, and an average particle size (D50) of 50 % of a total volume thereof, of up to 7.0 μ m, and

a catalytic activity capable of converting not at least 20 % of carbon monoxide into carbon dioxide when 2.8×10^{-4} mol of iron oxide particles obtained by heat-treating said iron compound catalyst in air at a temperature of 800° C for 15 minutes, are instantaneously contacted with 6.1×10^{-7} mol of carbon monoxide at a temperature of 250° C at a space velocity (SV) of $42,400 \text{ h}^{-1}$ in an inert gas atmosphere using a pulse catalytic reactor,

said iron oxide particles or said iron oxide hydroxide particles having an average particle size of 0.02 to 1.0 μ m, a BET specific surface area of 0.5 to 100 m²/g, a phosphorus content of less than or equal to 0.005 % by weight, a sulfur content of less than or equal to 0.1 % by weight and a sodium content of less than or equal to 0.2 % by weight.

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